

Why are shellfish areas closed?

2005 Municipal Warden Training

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Closure Types

- Conditional Areas
 - Rainfall
 - Sewage Treatment Plant
 - Combined Sewer Overflows (CSO)
 - Sewage Pump Stations
 - Marinas
 - Seasonal



Closure Types

- Flood Closures
- Biotoxin Closures
 - Paralytic Shellfish Poisoning (PSP)
 - Diarrhetic Shellfish Poisoning (DSP)
 - Amnesiac Shellfish Poisoning (ASP)



Details of Interest

- Repeal and Promulgate a rule
- Hotline
- Online closure information



Conditional Areas General

- Created from **closed areas**
- Requests from towns, harvesters, staff, etc. prompt a complete, thorough review of existing data and shoreline survey information to see if we can identify times when the water and shellfish is safe for human consumption
- Some of the things we look at...





Conditional Areas General

- Areas **may** be classified conditionally approved (MO Chapter IV @03.C.)
 - The area must be open for a reasonable amount of time (IV.(@03)(C)(1)(a)
 - The factors that determine the open period are:
 - Known
 - Predictable
 - Capable of being **reasonably** managed



Conditional Areas General

- Management Plan required
(IV.(@03)(C)(2))
 - Management plans for Sewage Treatment Plants (IV.(@03)(C)(2)(a)(i-viii))
- Management Plans for other than STP's
(IV.(@03)(C)(2)(b))



Conditional Areas General

- Minimum criteria for opening after a closure (IV(@03)(C)(2)(c):
 - Management plan is being met again (after insult)
 - Sufficient time for water to return to approved
 - Sufficient time has elapsed to allow the shellstock to reduce pathogens that might be present to acceptable levels. Studies establishing sufficient elapsed time shall document the interval necessary for reduction of coliform levels in the shellstock to pre-closure levels. The study may establish criteria for reopening based on coliform levels in the water; and
 - Shellstock feeding activity is sufficient to achieve coliform reduction.



Conditional Areas General

- If there is no study of the area then we are obligated to close for a minimum of 14 days (V.(@02.)(D)
 - Shellfish and water must be tested and meet approved criteria to open



Conditional Area General

- Cost per closure/opening ~ \$500
- Cost estimate for 2001 ~ \$54,000
 - 2004 ~\$52,500
 - This includes staff time and cost of publishing in the newspaper
 - Start to finish, one closure takes approximately 2.5 hours to process, including faxing, phone calls and mailing.
 - Hotline and web updates are lab staff time



Rainfall

- Predictable, science based study of results that identify an amount of rainfall during a time period which degrades water quality.
 - Examples:
 - 1.0” in 24 hours
 - 1.5” in 36 hours



Sewage Treatment Plants

- Management plan stipulates reporting events like the following:
 - Interruption in treatment
 - Inadequate or no treatment
 - Bypasses
 - Effluent disinfected only part of the year



Combined Sewer Overflows (CSO)

- Combined wastewater and stormwater in a drain on the side of the road
- Often discharge into growing areas
- Stormwater is often still not going to the WWTP – it goes overboard
 - Pet waste
 - Chemicals
 - other



Sewer Pump Stations

- Management plan for reporting:
 - Overflows
 - Broken pumps
 - Broken pipes
- Alarms, telemetry



Marinas

- Seasonal closures
- Definition – 10 boats or more with heads
- Mooring fields or slips



Seasonal Closures

- Discreet, identifiable time where the water quality meets approved criteria
- Seasonal based on:
 - Non-point pollution
 - Animal/bird migration
 - Marinas – cocktail coves
 - People (cottages, campgrounds, dogs on beach)



Flood Closure

- **Determination of Flood Event:** In the event that heavy rainfall occurs; or is predicted to occur; or if the National Weather Service initiates a storm/flood warning for the coast of Maine; a decision must be made to determine if the rainfall that occurred, or that is predicted to occur, is significant enough to warrant a widespread closure of shellfish harvesting.



Flood Closure

- In the event of predicted heavy rainfall (hurricanes, tropical storms, northeasters, other Acts of God, etc.), if the National Weather Service initiates a storm/flood warning, precautionary flood closures may be initiated in advance.
 - Prevents recalls
 - Prevents contaminated product from making it to market
 - Prevents harvesters from having to dump product



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Biotoxin Closures

- For PSP toxin closures made as they approach 80 ug/100gr – often at 60 ug/100gr depending on sampling schedule
- Closures are widespread



Repeal and Promulgate

- **RULE REPEAL AND PROMULGATION:**
DMR Regulation 95.10H, Closed Area 1-B, Jaffrey Point, NH to Brave Boat Harbor, York, promulgated on March 27, 2003, is repealed and replaced with the following rule:
 - REPEAL means to remove, lift
 - PROMULGATE means to put into place



Hotline

- Updated when rule is signed
- Written and recorded by staff
- Emailed to dealers and others as a courtesy – no formal policy
- Updated on website when webmaster can fit it in.



Online Closure Information

- http://www.maine.gov/dmr/rm/public_health/closures/closedarea.htm
 - Signed legal notice and color map
- http://www.maine.gov/dmr/rm/public_health/closures/pspclosures.htm
 - Signed legal notice and map
- http://www.maine.gov/dmr/rm/public_health/closures/shellfishhotline.htm

